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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/460,197	12/13/1999	JOHN SPENCER CUNNINGHAM	A65-25311	2142

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HONEYWELL INTERNATIONAL INC.  
101 COLUMBIA ROAD  
P O BOX 2245  
MORRISTOWN, NJ 07962-2245

EXAMINER

NGUYEN, KEVIN M

ART UNIT PAPER NUMBER

2674

DATE MAILED: 11/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/460,197

Applicant(s)

CUNNINGHAM ET AL.

Examiner

Kevin M. Nguyen

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2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 33-36, 38-46 and 48-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-36, 38-46 and 48-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. The amendment filed on 9/3/2002 is entered. The rejections of claims 33-36, 38-46, 48-52 are maintained.

### ***Drawings***

2. The corrected or substitute drawings were received on 9/3/2002. These drawings are approved.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 38-42 and 48-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Grothe et al (IDS) (US 4,635,050).

As to claims 38 and 48, Grothe et al teach a computer device associate a method for driving a hybrid stroke/raster display using formats designed for raster4 displays, a device comprising a raster symbol generator 60, a stroke vector generator 50, CRT display interface 90 and CRT display 10 (figure 3, col. 7, lines 22-36). Computer interface (not shown) applies digital instruction signal to address bus 61 and data bus 62 in accordance with the masking display presentation to be generated on the display face 10 of CRT 80. Video data output in digital form from the generator 60 is provided on bus 63 to memory 30 and CRT 80 (col. 6, lines 22-27). A bit is fetched from

memory 30 with identifies by it state 0 or 1 (generated code, col. 8, lines 6-8). Raster video 63 and stroke video 52 corresponds to graphics library (figure 3).

As to claims 39 and 49, Grothe et al teach raster video 63 and stroke video 52 corresponds to graphics library (figure 3).

As to claims 40 and 50, Grothe et al teach stroke vector generator 50, CRT display interface 90 and memory 30 (figure 3).

As to claims 41 and 51, Grothe et al teach the mode control signal on line 46 is switched to a state such that multiplexer 70 accept the input from stroke vector generator 50 on bus 51 (col. 7, lines 60-62).

As to claims 42 and 52, Grothe et al teach a bit being fetched from memory 30 with identifies by it state 0 or 1 (col. 8, lines 6-8).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 33-36 and 43-46 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomiyasu (US 5,138,305) in view of Stoddard et al (US 3,665,454), and further in view of Boger (US 6,326,935).

As to claims 33 and 43, Tomiyasu teaches a computer device associated a method for driving many display devices such as a cathode ray tube (CRT) 16, a liquid crystal display (LCD) 17, an electroluminescent display (ELD) 18, and a plasma display

panel (PDP) 19 (raster displays), a device comprising when the signals are all "0", the CRT is selected as show in Fig. 4. When the signals are all "1", the LCD is selected, and when signals FLT and AFT are "1" and signal DSC is "0", the ELD is selected (linking generated code from a formats to a standard library, col. 5, lines 16-19).

Keyboard controller 14 controls the switching operation of display units in response to the signals FLT, AFL, and DSC (dynamically switching between a display in real time, col. 4, lines 26-28).

Tomiyasu fails to teach a plurality of displays comprising stroke displays. However, Stoddard et al teach a computer 10 which controls multi displays devices 20 which is driving by X, Y, Z data register 14-1 and the function generator 16 including vector or writing rate displays (driving stroke displays, figure 1, col. 4, lines 70-71). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize stroke displays taught by Stoddard et al in Tomiyasu's display system because this would allow more information to be displayed and to improve usability.

Tomiyasu and Stoddard et al fail to teach hybrid displays. However, Boger teaches hybrid displays comprising the display device 114 is a display capable of operating in a television mode and a computer graphics mode, and which is capable of receiving and executing commands received by hardware system 100. By television mode is meant an operational mode wherein a standard interlaced television signal is received and displayed. By computer graphics mode is meant an operational mode wherein a noninterlaced or progressively scanned output from display system 112 is received and displayed. Display 114 may comprise a cathode ray-tube (CRT) type

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display, or may comprise an alternative type of display technology such as a projection display, liquid-crystal display (LCD), light-emitting diode (LED) display, gas or plasma display, electroluminescent display, vacuum fluorescent display, cathodoluminescent (field emission) display, plasma-addressed liquid crystal (PALC) display, high gain emissive display (HGED), and so forth (figure 2, col. 4, lines 49-65). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the hybrid displays taught by Boger in Tomiyasu's and Stoddard et al's display system because this would provide a dual mode display.

As to claims 34 and 44, Tomiyasu teaches font memory, V-RAM 10, as claimed as a graphics library having OpenGL.

As to claims 35 and 45, Tomiyasu teaches when the signals are all "0", the CRT is selected as show in Fig. 4. When the signals are all "1", the LCD is selected, and when signals FLT and AFT are "1" and signal DSC is "0", the ELD is selected (generated code formats, col. 5, lines 16-19).

As to claims 36 and 46, Stoddard et al teach X, Y, Z data register 14-1 and the function generator 16 including vector or writing rate displays (driving stroke displays, figure 1, col. 4, lines 70-71).

As to claim 47, Boger teaches a method for video controller 202 as claimed as driving hybrid stroke/raster displays (figure 2).

### ***Response to Arguments***

7. Applicant's arguments with respect to independent claims 33-36, 38-46, 48-52 have been considered but are moot in view of the new ground(s) of rejection.

**Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on MON-THU from 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reached on **703-305-4709**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231


**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kevin M. Nguyen  
Examiner  
Art Unit 2674

  
**RICHARD HJERPE**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**